



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

- Amended - FR 7-7-09

APPLICATION FOR PERMIT

TO CONSTRUCT A RESERVOIR AND TO STORE FOR BENEFICIAL USE
WATERS OF THE STATE OF WASHINGTON

RECEIVED

JUL 06 2009

DEPARTMENT OF ECOLOGY
EASTERN REGIONAL OFFICE

\$50.00 NON-REFUNDABLE MINIMUM STATUTORY FILING FEE REQUIRED WITH APPLICATION
(GRAY BOXES FOR OFFICE USE ONLY)

APPLICATION NUMBER R 3-30526	W.R.I.A. 32	COUNTY Walla Walla	PRIORITY DATE 7-6-2009	TIME	ACCEPTED
APPLICANT'S NAME <u>City of Walla Walla, Washington</u>			TELEPHONE NUMBER (509) 527-4537		
DATE AND PLACE OF INCORPORATION, IF APPLICANT IS A CORPORATION					
ADDRESS (STREET) 55 Moore Street		(CITY) Walla Walla	(STATE) WA	(ZIP CODE) 99362-0216	
SOURCE, USE, AND CAPACITY OF RESERVOIR					
NAME OF PROPOSED RESERVOIR: "City of Walla Walla Basalt Aquifer Reservoir," or "City Reservoir," (located in Wanapum and Grande Ronde Formations underlying the City of Walla Walla and surrounding areas).					
NAME OF STREAM OR OTHER SOURCE FOR RESERVOIR SUPPLY <u>Mill Creek</u> . (Water is diverted from Mill Creek based on water right evidenced by Oregon Certificate number 13276 which superseded Oregon Certificate number 5076. See Appendix A; and Oregon Permit S-54483) See Appendix B. <u>Water diverted from Mill Creek is conveyed to the City of Walla Walla Mill Creek Water Treatment Plant, hereafter "WTP", where it is ozonated and chlorinated and then, in part, moved into the City's water distribution system and introduced into up to ten (10) ASR wells to charge the underground basalt reservoirs. Water will also be withdrawn for municipal purposes from some or all of these wells).</u>			TRIBUTARY OF <u>Walla Walla River</u>		
USE(S) TO BE MADE OF IMPOUNDED WATER (IRRIGATION, POWER, FISH PROPOGATION, ETC.) <u>All municipal uses including, among other potentials, domestic, industrial, fish propagation, and irrigation.</u>					
NUMBER OF ACRE FEET TO BE STORED AT MAXIMUM OPERATING LEVEL <u>11,750 acre-feet (3.8 Billion Gallons) using up to ten wells</u> (including Wells No. 1 and 6).			MONTHS OF YEAR DURING WHICH RESERVOIR IS TO BE FILLED - year round. The exact dates of recharge water availability are dependent, among other factors, on the particular water right exercised, stream flows, water system demand, and turbidity in Mill Creek. Water is potentially available year round under Oregon Certificate 13276. Water is potentially available from November 1 to April 15 under Oregon Permit S-54483 subject to; among other restrictions are high and low instream flow protection limits.		
NUMBER OF ACRES TO BE IRRIGATED, IF USED FOR IRRIGATION: There are various small areas to be irrigated within the <u>City's service area</u> , such as lawns and gardens associated with residences, business facilities and churches as well as public areas, e.g. parks owned by the City.					

R3-30526 rcvd 12-21-2006

\$12,400.00 → 6,200 AF

\$23,500.00 → 11,750 AF

\$11,100.00 (5,550 AF balance)

7-14-09
Karen is this
where u want
the "amended"
app? KR

TYPE AND CAPACITY OF DIVERSION WORKS IF WATER IS TO BE WITHDRAWN: City of Walla Walla-owned wells for charging and withdrawing numbers up to ten (10). They now exist or will be located in Blocks I, II, and III. Wells completed in Block I are Wells No. 1 (operated as an ASR-type well), Well No. 2, and Well No. 3. Wells No. 2 and 3 may be converted to ASR wells. Wells completed in Block II are Well No. 4 and Well No. 6 (operated as an ASR-type well). Well No. 4 may be converted to an ASR well. Wells located in Block III are Wells No. 5 and 7. Wells No. 5 and 7 may be converted to ASR wells. Additional ASR wells may be also constructed (1) in Block I near the Mill Creek Water Treatment Plant, (2) in Block II near Walla Walla Community College, and (3) in Block III between Wells No. 5 and 7. The attached map (Figure 1) shows the location of the City's presently operated wells as an ASR-type and other existing and potential wells. See Appendix C. The existing and proposed ASR wells are summarized in the following table:

Well	TRS Location	Hydrostratigraphic Location	Well Depth (feet)	Estimated Recharge Capacity (gpm)	Note
Existing ASR Wells					
Well No. 1	T7N/R36E-13, SE NW	Block I	810	1,300	
Well No. 6	T7N/R36E-22, SE NE	Block II	1,330	1,600	
Proposed ASR Wells					
Well No. 2	T7N/R36E-13, SE NW	Block I	808	1,600	Convert existing well
Well No. 3	T7N/R37E-18, SE NW	Block I	1,169	1,600	Convert existing well
Well No. 4 (Existing)	T7N/R36E-22, SW SW	Block II	789	1,600	Convert existing well
Well No. 5	T7N/R36E-28, SE SE	Block III	1,090	1,600	Convert existing well or drill new well
Well No. 7	T7N/R36E-33, NW NW	Block III	1,412	1,600	Convert existing well or drill new well
WWCC	T7N/R36E-14, SE SW	Block II	1,324	1,600	Convert existing well or drill new well
Mill Creek WTP Well	T7N/R36E-13, SE NW	Block I	TBD	1,600	Convert existing well or drill new well
Near Wells 5 and 7	T7N/R36E-33, NW NE	Block III	TBD	1,600	Convert existing well or drill new well

Notes: TBD – means
"to be determined."

2.

LOCATION OF POINT OF DIVERSION OR WITHDRAWAL

ON ACCOMPANYING PLATS OR MAPS, ACCURATELY MARK AND IDENTIFY EACH POINT OF DIVERSION.
GIVE MEASURED DISTANCE AND BEARING, OR NORTH-SOUTH AND EAST-WEST DISTANCES FROM NEAREST SECTION CORNER.

COMPLETE EITHER A OR B	A	<u>Point of diversion related to Mill Creek is located at the NW ¼ of the NE ¼ of Section 22, Township 6N, Range 38 EWM. See Appendix D (map). The latitude of the diversion is 45.9901 and the longitude is -118.0483.</u>
	B	

DISTANCE AND BEARING TO SECTION CORNER:

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION) The storage area is in the sections summarized in the following table:

SECTION

TOWNSHIP N.

RANGE (E. OR W.) W.M.

COUNTY

Aquifer Area	ASR Wells	Township and Range	Sections
Block I	Well No. 1 (existing); Well No. 2. Well No. 3, New Well near Mill Creek WTP (proposed wells)	T7N/R36E	1, 2, 11, 12, 13, 14, 15
		T8N/R36E	26, 26, 35, 36
		T7N/R37E	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17
		T8N/R37E	25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36
Block II	Well No. 4 (proposed), Well No. 6 (existing) New Well at WWCC (proposed)	T6N/R36E	1, 2, 3, 10, 11, 12, 13, 14, 15
		T7N/R36E	21, 22, 23, 24, 25, 26, 27, 28, 34, 35, 36
		T8N/R36E	4, 5, 6, 7, 8, 9, 16, 17, 18
		T6N/R37E	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 18
		T7N/R37E	19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33, 34
Block III	Well No. 5, Well No. 7, New Well Between Wells 5 and 7 (proposed)	T6N/R36E	4, 5, 6, 7, 8, 9
		T7N/R36E	27, 28, 29, 30, 31, 32, 33,

See also map attached hereto marked Appendix A.

3. IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, COMPLETE THIS SECTION

LOT N/A BLOCK N/A OF (GIVE NAME OF PLAT OR ADDITION) N/A

4. * LOCATION OF IMPOUNDING STRUCTURE - Underground

IMPOUNDING STRUCTURE LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)

SECTION

TOWNSHIP N.

RANGE (E. OR W.) W.M.

Naturally occurring bounded water bearing zone consisting of aquifer compartments within the Columbia River Basalt Aquifer System associated with the Wanapum and Grande Ronde formations.

The proposed City ASR Reservoir is regional in scale and is described in the supporting materials to this application. See Appendix E (Golder Technical Memorandum, i.e. Recovery Efficiency, dated July 3, 2009) of Golder Report on ASR Reservoir Permit Application (2009a), and Golder Technical Memorandum on Groundwater Modeling to Support the City of Walla's Aquifer Storage and Recovery Reservoir Permit Application (2009b). Proposed ASR withdrawal wells are located in T7N, R36E-13 (Wells No. 1 and 2 and new ASR well), T7N/R36E-14 Walla Walla Community College or new well), T7N/R36E-22 (Wells No. 4 and 6), T7N/R36E-28 (Well No. 5), T7N/R36E-33 (Well No. 7) and new ASR well, and T7N/R37E-18 (Well No. 3). See preceding table in this section 2.

LEGAL SUBDIVISION OF LANDS IN WHICH THE SUBMERGED AREA IS TO BE LOCATED
(THE OUTLINE OF THIS LAND IS TO BE SHOWN ON THE MAP TO ACCOMPANY THIS APPLICATION)

DO YOU OWN THIS PROPERTY <input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> NO YES – The City of Walla Walla owns (or will own) all of the diversion and treatment facilities distribution system, ASR wells and other wells as well as associated withdrawal facilities. NO – The lands overlying the storage the storage area are owned in part by various other landowners.	IF NO, HAVE YOU SECURED FLOOD RIGHTS FOR LANDS TO BE INUNDATED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO - No lands will be flooded. Storage will be underground in the City of Walla Walla Basalt Aquifer Reservoir.
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5.

CONSTRUCTION OF IMPOUNDING STRUCTURE

HEIGHT OF DAM (FEET) <u>N/A</u>	LENGTH OF TOP (FEET) <u>N/A</u>	LENGTH OF BOTTOM (FEET) <u>N/A</u>	WIDTH ON TOP (FEET) <u>N/A</u>
SLOPE OF FRONT OR WATER SIDE (NUMBER OF FEET HORIZONTAL TO ONE FOOT VERTICAL) <u>N/A</u>		SLOPE OF BACK SIDE (NUMBER OF FEET HORIZONTAL TO ONE FOOT VERTICAL) <u>N/A</u>	
HEIGHT OF DAM ABOVE WATER LINE AT MAXIMUM FLOOD FLOW (FEET) <u>N/A</u>			
TYPE OF CONSTRUCTION OF DAM AND MATERIAL OF WHICH IT IS TO BE BUILT <u>N/A</u>			
LOCATION AND DIMENSIONS OF SPILLWAYS (STATE WHETHER OVER, AROUND, OR THROUGH DAM) <u>N/A</u>			
NUMBER OF ACRES TO BE SUBMERGED BY RESERVOIR WHEN FULL <u>N/A</u>	MAXIMUM DEPTH (FEET) <u>N/A</u>	APPROXIMATE AVERAGE DEPTH (FEET) <u>N/A</u>	
ESTIMATED COST OF PROPOSED WORK: Approximately \$7 Million for construction of new ASR wells and modification of existing wells.			
CONSTRUCTION WILL BEGIN ON OR BEFORE (DATE). <u>Initiation of construction will start after approval of this application.</u> Conversion of Well No. 1 to ASR was completed in 1999, and a Well No. 1 pilot test was completed in 1999. Well No. 6 was converted to an ASR-type well in 2004.		CONSTRUCTION WILL BE COMPLETED ON OR BEFORE (DATE) Construction of new and modification of existing wells is expected to be pursued by the City on a schedule designed on an incremental basis to satisfy future needs, taking into account associated financial and hydrogeological feasibility thereof, with the upgrading of existing wells to take place and the completion of new wells between <u>2010 and 2024.</u>	

SIZE AND TYPE OF OUTLET STRUCTURE

6.

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED (IF DIFFERENT THAN ABOVE)

COPY LEGAL DESCRIPTION FROM DEED: OR ATTACH COPY OF DEED. TAX STATEMENT DESCRIPTIONS ARE NOT ACCEPTABLE.
 ALSO OUTLINE THIS PROPERTY ON THE MAPS OR PLATS SUBMITTED WITH THIS APPLICATION.

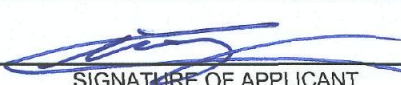
The description of the property to which artificially stored water will be served is the City's service area as set forth in the most recently approved state Department of Health approved "City of Walla Walla Water System Plan", see Appendix F attached hereto, – the most recent Department of Health Approve, City of Walla Walla, Water System Plan, and such other properties as the City is authorized to provide municipal water both now and in the future.

DO YOU OWN THIS PROPERTY

☒ YES ☒ NO

IF NO, GIVE NAME AND ADDRESS OF OWNER The water will be used in the area served by the City of Walla Walla municipal water supply system service area which includes multiple property owners. (The City of Walla Walla owns and maintains the water system infrastructure, including wells, distribution system piping and valving, water storage facilities, water treatment facilities, and raw water conveyance and storage.) Owners of property where water is used include (1) private owners, e.g. residential, business, church owners, and (2) government City, State, Federal and other special purpose governmental entity owners.

NOTE: In support of the application as to the satisfaction of the requirements of WAC 173-157-110 through 170. See the collation document Appendix G attached hereto, which relates to for noted materials which relates to the Golder Report April, 2009, supra. See Appendix E.

 7/2/09
SIGNATURE OF APPLICANT DATE
Craig S. Sivley, P.E.
Public Works Director
City of Walla Walla

STATE OF WASHINGTON }
DEPARTMENT OF ECOLOGY } ss.

This is to certify that I have examined the foregoing application together with the accompanying maps and data, and return the same for correction or completion as follows:.....

In order to retain its priority, this application must be returned to the Department of Ecology, with corrections, on or before, 20.....

Witness my hand this day of, 20

.....
Department of Ecology

If you require this document in an alternate format, please contact the Water Resource Program at (360) 407-6600 or TTY (for the speech or hearing impaired) at 711 or 1-800-833-6388.